

REMARKS

Claims **1-10, 13-20, 23-30, 33-45** and **51-66** are pending in the application.

Claims **1-10, 13-20, 23-30, 33-45** and **51-66** stand rejected.

Claims **1, 7, 9, 10, 13-15, 20, 23-25, 30, 33-35, 38, 39, 41-45, 51-55, and 61-66** have been amended. No new subject matter has been added. Support for the amendments can be found throughout the originally-filed Application, and at least at paragraphs [0018] and [0022]-[0034], and Figures 1-4.

Examiner Interview

Applicants thank Examiner Mered for his time spent during the interview that took place on March 30, 2011. Applicants appreciate the Examiner's insights as to the pending claims and rejections, and believe the claim amendments and remarks offered herein are in harmony with those discussions.

Rejection of Claims under 35 U.S.C. §112

Claims 15-20, 23-24, 42, 52, 57, and 62 are rejected under 35 U.S.C. 112, second paragraph as purportedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Applicants respectfully traverse these rejections in view of present amendments to independent claim 15. Support for these features can be found throughout the originally-filed Application. For example, support for claim 15's features can be found as the following:

“means for detecting a failure of a first link” can be found at least at paragraphs [0018], [0028]-[0030], and [0034] and Figures 2 (performed by link failure propagation module 204) and 3 (element 306);

“means for detecting a recovery of said first link” can be found at least at paragraphs [0027] and [0032] and Figure 2 (performed by link failure propagation module 204 as configured by configuration interface 202);

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“means for disabling a second port” can be found at least at paragraphs [0018], [0019], [0027]-[0029], and Figures 2 (performed by link failure propagation module 204) and 3 (element 312);

“means for re-enabling said second port” can be found at least at paragraphs [0027] and [0032] and Figure 2 (performed by link failure propagation module 204 as configured by configuration interface 202); and

“means for said communications channel failing back to said first link and said second link” can be found at least at paragraphs [0027] and [0032] and Figure 2 (performed by link failure propagation module 204 as configured by configuration interface 202).

Applicants respectfully submit that the Examiner’s concerns are addressed thereby. Applicants therefore respectfully request the Examiner’s reconsideration and withdrawal of the rejection to this independent claim, and all claims depending therefrom, and an indication of the allowability of same.

Rejection of Claims under 35 U.S.C. § 103

Claims 1-10, 13-20, 23-30, 33-45, and 51-60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Saksio, U.S. Patent Publication No. 2004/0105390 (“Saksio”) in view of Hamami, U.S. Patent No. 5,959,972 (“Hamami”).

Applicants respectfully submit that the combination of Saksio and Hamami fails to teach the claimed failing back. Saksio’s system purportedly provides a fast recovery process in a local area network. Saksio’s switch SW1 is shown in Figure 1 to have an up-link LSW1 (or upstream connection) to switch SW7 and a down-link L1₁ (or downstream connection) to host 1. If the up-link LSW1 connected to switch SW1 fails, switch SW1 will propagate the link-down (non-functional) state of the up-link LSW1 down to host 1 on the down-link L1₁. However, Saksio’s system fails to teach any sort of failing back, let alone the claimed communications channel failing back to the first and second links in response to the second port being re-enabled.

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The Office Action attempts to characterize the failback functionality described in Hamami to demonstrate the teaching of the failing back feature of the claims. Hamami's system, as shown in Figure 2, places a main link and a backup link between a pair of switches. If the main link fails, traffic is directed over the backup link. If the main link recovers, traffic is directed back over the main link. However, Hamami's functionality cannot be combined with Saksio, and certainly not in a way that shows, teaches or suggests the claimed failing back.

The Office Action asserts on page 4 that the functionality of port 0 of Hamami's switch can be ported to Saksio's host 1, and the functionality ports 1 and 2 of Hamami's switch can be ported to Saksio's switches SW1 and SW2, respectively. Thus, Hamami's switch is effectively being expanded to include two switch devices and a host device. Applicants respectfully submit that one skilled in the art would not even consider such a combination because a single switch device (like the switch disclosed in Hamami) would not be designed to include (or even capable of including) any other devices beyond the single switch, particularly a host device.

Further, even if one were to attempt to combine the references in the manner posited in the Office Action, Saksio's host 1 would still fail to support Hamami's port 0. In Hamami, port 0 is coupled to both port 1 and port 2. If Hamami's port 1 is ported to Saksio's switch SW1 and Hamami's port 2 is ported to Saksio's switch SW2, then Saksio's host 1 would have to be capable of supporting two switches, SW1 and SW2, connected to the same port (e.g., Hamami's port 0).

However, Saksio's host 1 does not possess such a capability, nor would one of skill in the art expect this to be the case. Instead, Saksio's host 1 has two separate links, L₁₁ and L₁₂, connecting to switches SW1 and SW2, respectively (as is shown in Figure 1). This demonstrates that the two different ports on Saksio's host 1 are used to separately connect to switches SW1 and SW2. This is also supported in paragraph [0030] of Saksio: the host moves all LAN traffic into the redundant LAN port if the currently used LAN port is changed into a link-down state. Paragraph [0026] of Saksio also confirms that "redundant" means that the host connection has been duplicated in order to allow a switch over from the active link L₁₁ to the standby link L₁₂. Thus, the two separate ports on Saksio's host 1 connect to two different switches via two different

links. Accordingly, even if Saksio and Hamami could be successfully combined, as posited by the Office Action, Saksio's host 1 would be unable to use a port like Hamami's port 0 to fail back from one switch to another since Saksio's host 1 is incapable of supporting such a port. Each system of these references would thereby be rendered unfit for their (clearly) separate intended purposes.

Further, even if this or another combination could be successfully characterized as showing, teaching or suggesting failing back from a backup link to a main link between a pair of switches (a possibility Applicants mention despite the lack of such teaching in the presently-cited references), such characterization would still fail to show, teach or suggest the claimed invention, because the claims provide for failing back to both the first link that is in an upstream direction from the network element and the second link in a downstream direction in response to the re-enabling of the second port (that is coupled to the second link), where the first link and second link can be described as being in series (as opposed to parallel). Saksio's switch would have to fail back to both up-link and down-link in response to the purported re-enabling of the port coupled to down-link. Unfortunately, Saksio' switch (even if somehow modified by Hamami's teachings) would only fail back to a parallel main link in response to recovery of a parallel main link. Even if the purported re-enabling of the port coupled to down-link were successfully characterized as a recovery of a parallel main link (which Applicants maintain is not the case), such a scenario would only result in failing back to the now-recovered down-link. The recovery of a down-link does not effect any sort of failing back of the up-link direction since such up-link failing back is dependent on recovery of a parallel main link in the up-link direction. Thus, even if the cited references could be successfully combined, the combination of references would still fail to teach the claimed failing back to the first link that is in an upstream direction and to the second link that is in a downstream direction.

Accordingly, the combination of Saksio and Hamami, alone or in permissible combination, fails to teach the claimed failing back to the first link (coupled between the network element and upstream portion of a communications network) and the second link (coupled between the network element and downstream portion of the communications

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network) in response to the re-enabling of the second port (which is re-enabled in response to the recovery of the first link).

For at least these reasons, Applicants respectfully submit that independent Claim 1, as amended, is patentably distinguishable over the cited sections of Saksio and Hamami, alone or in permissible combination. For similar reasons, independent Claims 15, 25, 35, and 38 are also patentably distinguishable over the cited references. Applicants therefore respectfully submit that independent Claims 1, 15, 25, 35, and 38, and all claims depending therefrom, are in condition for allowance. Applicants therefore respectfully request the Examiner's reconsideration and withdrawal of the rejection to these claims and an indication of the allowability of same.

Claims 61-65 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Saksio in view of Hamami, and further in view of Gai et al., U.S. Patent No. 6,535,491 ("Gai"), and Hebert, U.S. Patent No. 6,728,780 ("Hebert"). Applicants respectfully traverse this rejection for at least the reasons set forth above with respect to independent claims 1, 15, 25, 35, and 38.

Claim 66 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Saksio in view of Hamami, and further in view of Watanuki et al., U.S. Publication No. 2002/0016874 A1 ("Watanuki"). Applicants respectfully traverse these rejections for at least the reasons set forth above with respect to independent claim 1.

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CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to Deposit Account 502306.

Respectfully submitted,

/ Samuel G. Campbell III /

Samuel G. Campbell III
Attorney for Applicant(s)
Reg. No. 42,381
Telephone: (512) 439-5084
Facsimile: (512) 439-5099